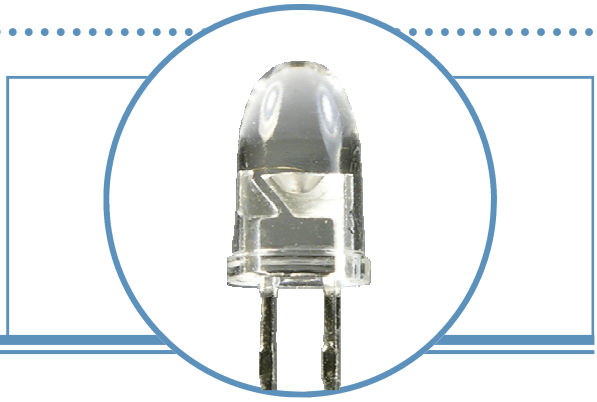
High-Intensity Yellow LED in Plastic T-1¾ Package

TT electronics
OPTEK Technology

OVLGY0CxB9

- Narrow Beam Angle
- High Luminous Intensity
- Water Clear Plastic Package
- Yellow (589nm)

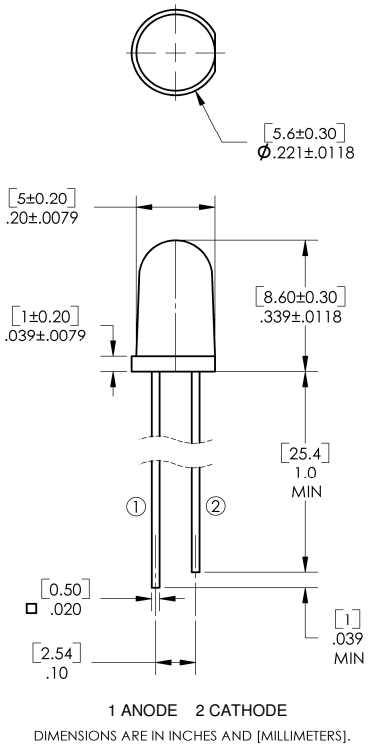


The OVLGY0CxB9 is a high intensity AlInGaP LED mounted in a clear plastic T-1¾ package. The device incorporates an integral molded lens that enables a narrow beam angle and provides an even emission pattern. Designed to produce light over a wide range of drive currents, this LED is useful in applications requiring higher on-axis brightness than that achievable with standard lamps.

Applications

- Indoor/Outdoor Applications
- Message Boards
- Store Front Signage
- Indicators

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVLGY0C6B9	AlInGaP	Yellow	10000	Water Clear
OVLGY0C7B9			12500	
OVLGY0C8B9			16000	
OVLGY0C9B9			20000	



RoHS

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Storage Temperature Range	-40 ~ +100 ℃
Operating Temperature Range	-40 ~ +85 ℃
Reverse Voltage	5 V
Continuous Forward Current[2]	50 mA
Peak Forward Current (10% Duty Cycle, 1KHz)	100 mA
Power Dissipation	120 mW
Lead Soldering Temperature (3mm from the base of the epoxy bulb)[1]	260 ℃
Electrostatic Discharge	2000 V

Note:
1. Solder time less than 5 seconds at temperature extreme.

Electrical Characteristics

T_A = 25°C unless otherwise noted

SYMBOL	PARAMETER		MIN	TYP	MAX	UNITS	CONDITIONS
I_v	Luminous Intensity	x = 6	6300	10000	----	mcd	I_F = 20mA
		7	8000	12500	----		
		8	10000	16000	----		
		9	12500	20000	----		
V_F	Forward Voltage		----	2.0	2.4	V	I_F = 20mA
I_R	Reverse Current		----	----	10	μA	V_R = 5V
λ_P	Peak Wavelength		----	591	----	nm	I_F = 20mA
λ_D	Dominant Wavelength		----	589	----	nm	I_F = 20mA
2Θ½H-H	50% Power Angle		----	6	----	deg	I_F = 20mA

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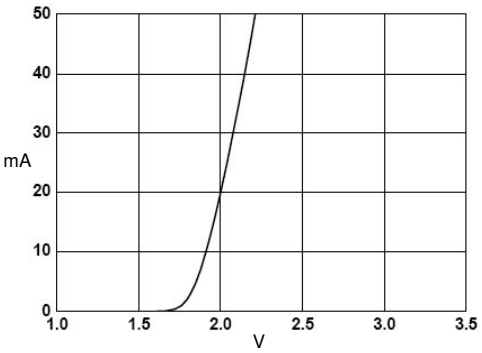
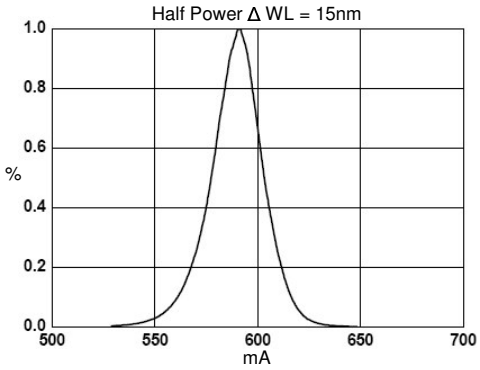
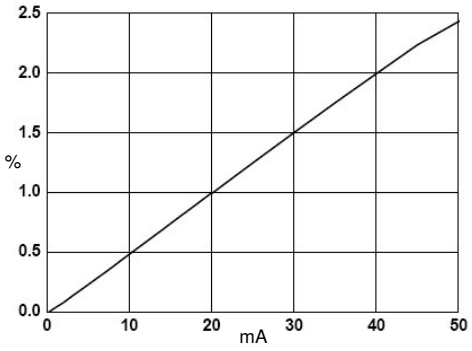
Typical Electro-Optical Characteristics Curves



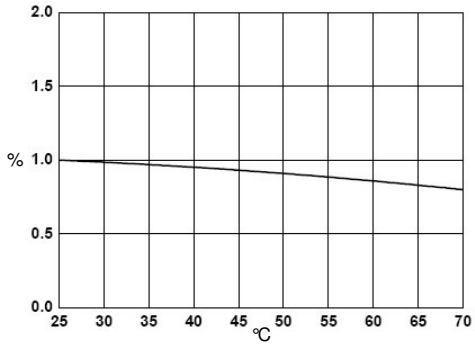
Forward Current vs. Forward Voltage



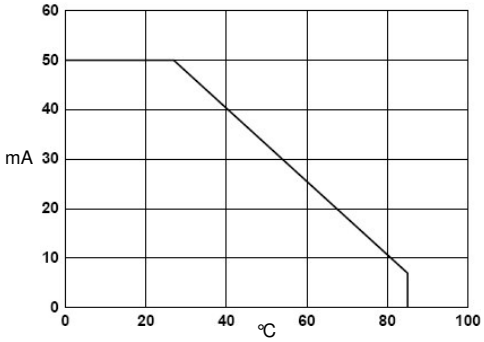
Relative Luminous Intensity vs. Wavelength



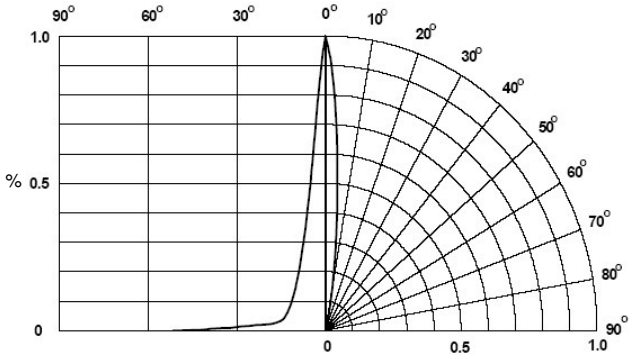
Relative Luminous Intensity vs. Forward Current



Relative Luminous Intensity vs. Ambient Temperature



Forward Current vs. Ambient Temperature



Relative Intensity vs. Radiation Angle

Issue	Change Description	Approval	Date
1.0	Initial Release	J. Haynie	6/7/05

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